

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
02560035B8

Application Number
not assigned

Applicant(s)
T. Rappaport, et al.

Filing Date
concurrently

Group Art Unit
not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|----------|------------------|-------|----------|-------------------------------|
| AS | 1 | 4,675,147 | 6-23-87 | Schaefer et al. | | | 4-6-83 |
| | 2 | 4,736,453 | 4-5-88 | Schloemer | | | 12-10-85 |
| | 3 | 4,885,694 | 12-5-89 | Pray et al. | | | 4-29-87 |
| | 4 | 5,111,392 | 5-5-92 | Malin | | | 6-9-89 |
| | 5 | 5,119,307 | 6-2-92 | Blaha et al. | | | 12-22-89 |
| | 6 | 5,239,487 | 8-24-93 | Horejsi et al. | | | 10-24-90 |
| | 7 | 5,293,640 | 3-8-94 | Gunmar et al. | | | |
| | 8 | 5,307,261 | 4-26-94 | Maki et al. | | | 6-28-91 |
| | 9 | 5,337,149 | 8-9-94 | Kozah et al. | | | 11-12-92 |
| ↓ | 10 | 5,339,184 | 8-16-94 | Tang | | | 6-15-92 |
| AS | 11 | 5,375,123 | 12-20-94 | Andersson et al. | | | 2-5-93 |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

EXAMINER /Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
02560035B β

Application Number
not assigned

Applicant(s)
T. Rappaport, et al.

Filing Date
concurrently

Group Art Unit
not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REV | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|----------|----------------------|-------|----------|-------------------------------|
| AS | 12 | 5,394,522 | 2-28-95 | Sanchez-Frank et al. | | | 9-13-93 |
| | 13 | 5,450,615 | 9-12-95 | Fortune et al. | | | 12-22-93 |
| | 14 | 5,458,123 | 10-17-95 | Unger | | | 4-29-94 |
| | 15 | 5,465,390 | 11-7-95 | Cohen | | | 2-12-93 |
| | 16 | 5,482,050 | 1-9-96 | Smokoff et al. | | | 2-17-94 |
| | 17 | 5,485,568 | 1-16-96 | Venable et al. | | | 10-8-93 |
| | 18 | 5,491,644 | 2-13-96 | Pickering et al. | | | 9-7-93 |
| | 19 | 5,491,837 | 2-13-96 | Haartsen | | | 3-7-94 |
| | 20 | 5,493,679 | 2-20-96 | Virgil et al. | | | 10-29-93 |
| ↓ | 21 | 5,515,269 | 5-7-96 | Willis et al. | | | 11-8-93 |
| AS | 22 | 5,528,518 | 6-18-96 | Bradshaw et al. | | | 10-25-94 |

FOREIGN PATENT DOCUMENTS

| REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | YES | NO |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

EXAMINER /Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

02560035BB

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

T. Rappaport, et. al.

Serial No.: (not yet assigned) Group Art Unit: not yet assigned
(Divisional application of 09/633,120)

Filed: Concurrently Examiner not yet assigned

For: Improved Method and System for a Building Database Manipulator

Commissioner of Patents
P.O. Box 1450
Alexandria 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Under the provisions of 37 C.F.R. 1.97 through 1.99 and pursuant to applicant's duty of disclosure under 37 C.F.R. 1.56, applicants respectfully bring the following documents, listed on the attached form PTO-1449, to the attention of the Examiner in charge of the above-identified application. The references cited in the attached PTO-1449 are readily available to the Examiner in co-pending parent U.S. application Serial No: 09/633,120. Thus, according to the rules of practice, these references are not provided herein, but are listed on the PTO-1449 form and should be considered by the Examiner. If the Examiner is unable to obtain the listed references, applicant will gladly provide such references upon notification by the Examiner in charge of the examination of the above-identified application.

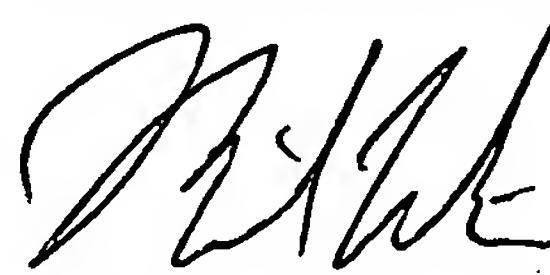
These citations do not constitute an admission that the references are relevant or material to the claims. They are only cited as constituting related art of which the applicant is aware.

02560035BB

It is respectfully requested that the listed references be considered by the Examiner and formally made of record in this application.

Please charge any deficiencies in fees and credit any overpayment of fees to attorney's Deposit Account No. 50-2041.

Respectfully submitted,



Michael E. Whitham
Registration No.: 32,635

Date: 3/26/04
Whitham, Curtis & Christofferson, PC
11491 Sunset Hills Road - #340
Reston, VA 20190
703/787-94000

Please associate this
Application with
Customer No. 30743

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)

02560035B8

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|----------|------------------|-------|----------|-------------------------------|
| AS | 23 | 5,539,665 | 7-23-96 | Lamming et al. | | | 7-25-94 |
| | 24 | 5,553,312 | 9-3-96 | Gatley et al. | | | 6-20-94 |
| | 25 | 5,553,620 | 9-10-96 | Snider et al. | | | 5-2-95 |
| | 26 | 5,555,354 | 9-10-96 | Strasnick et al. | | | 3-23-93 |
| | 27 | 5,561,841 | 10-1-96 | Markus | | | |
| | 28 | 5,564,070 | 10-8-96 | Want et al. | | | 7-30-93 |
| | 29 | 5,594,946 | 1-14-97 | Menich et al. | | | 2-28-95 |
| | 30 | 5,598,532 | 1-28-97 | Liron | | | 10-21-93 |
| | 31 | 5,625,827 | 4-29-97 | Krause et al. | | | 12-23-94 |
| ↓ | 32 | 5,636,344 | 6-3-97 | Lewis | | | 8-22-91 |
| AS | 33 | 5,689,355 | 11-18-97 | Okubo et al. | | | 7-1-96 |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

EXAMINER

/Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
02560035BB

Application Number
not assigned

Applicant(s)
T. Rappaport, et al.

Filing Date
concurrently

Group Art Unit
not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|----------|----------------|-------|----------|-------------------------------|
| AS | 34 | 5,761,093 | 6-2-98 | Urbish et al. | | | 5-8-97 |
| | 35 | 5,794,128 | 8-11-98 | Brockel et al. | | | 9-20-95 |
| | 36 | 5,799,154 | 8-25-98 | Kuriyan | | | 6-27-96 |
| | 37 | 5,809,282 | 8-15-98 | Cooper et al | | | 6-7-95 |
| | 38 | 5,815,395 | 9-29-98 | Hart et al. | | | 6-29-95 |
| | 39 | 5,828,960 | 10-27-98 | Tang et al. | | | 3-31-95 |
| | 40 | 5,831,610 | 11-3-98 | Tonelli et al. | | | 2-23-96 |
| | 41 | 5,832,389 | 11-3-98 | Dent | | | 4-3-96 |
| | 42 | 5,861,887 | 1-19-99 | Butler et al. | | | 12-5-95 |
| ✓ | 43 | 5,867,112 | 2-2-99 | Kost | | | 5-14-91 |
| AS | 44 | 5,877,777 | 3-2-99 | Colwell | | | 4-7-97 |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

EXAMINER /Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

02560035BB

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|---------|------------------|-------|----------|-------------------------------|
| AS | 45 | 5,878,328 | 3-2-99 | Chawla et al. | | | 12-21-95 |
| | 46 | 5,907,850 | 5-25-99 | Krause et al. | | | 1-21-97 |
| | 47 | 5,917,808 | 6-29-99 | Kosbab | | | 1-17-97 |
| | 48 | 5,923,850 | 7-13-99 | Barroux | | | 6-28-96 |
| | 49 | 5,926,762 | 7-20-99 | Arpee et al. | | | 5-17-96 |
| | 50 | 5,940,196 | 8-17-99 | Piehler et al. | | | 5-16-97 |
| | 51 | 5,945,976 | 8-31-99 | Iwamura et al. | | | 12-10-96 |
| | 52 | 5,948,055 | 9-7-99 | Pulsipher et al. | | | 8-29-96 |
| | 53 | 5,949,335 | 9-7-99 | Maynard | | | 4-14-98 |
| ↓ | 54 | 5,949,988 | 9-7-99 | Feisullin et al. | | | 4-3-97 |
| AS | 55 | 5,953,669 | 9-14-99 | Stratis et al. | | | 12-11-97 |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

EXAMINER /Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

| | | |
|--|---------------------------------------|---|
| Docket Number (Optional) 02560035Bβ | | Application Number not assigned |
| Applicant(s) T. Rappaport, et al. | | |
| Filing Date concurrently | Group Art Unit not assigned | |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|-----|-----------------|----------|-------------------|-------|----------|-------------------------------|
| AS | 56 | 5,963,867 | 10-5-99 | Reynolds et al. | | | 8-16-95 |
| | 57 | 5,970,406 | 10-19-99 | Komara | | | 12-31-96 |
| | 58 | 5,987,328 | 11-16-99 | Ephremides et al. | | | 4-24-97 |
| | 59 | 6,006,021 | 12-21-99 | Tognazzini | | | 7-1-96 |
| | 60 | 6,018,625 | 1-25-00 | Hayhall et al. | | | 8-27-97 |
| | 61 | 6,021,316 | 2-1-00 | Heiska et al. | | | |
| | 62 | 6,032,105 | 2-29-00 | Lee et al. | | | 7-31-97 |
| | 63 | 6,038,547 | 3-14-00 | Casto | | | 1-7-98 |
| | 64 | 6,044,273 | 3-28-00 | Tekinay | | | 12-10-96 |
| ✓ | 65 | 6,058,102 | 5-2-00 | Drysdale et al | | | 11-6-98 |
| AS | 66 | 6,058,262 | 5-2-00 | Kawas et al. | | | 4-18-97 |

FOREIGN PATENT DOCUMENTS

| REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | YES | NO |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

| | |
|--|-----------------|
| EXAMINER /Akash Saxena/ (12/26/2006) | DATE CONSIDERED |
|--|-----------------|

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
02560035B

Application Number
not assigned

Applicant(s)
T. Rappaport, et al.

Filing Date
concurrently

Group Art Unit
not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|----------|-----------------|-------|----------|-------------------------------|
| AS | 67 | 6,059,842 | 5-9-00 | Dumarot et al. | | | 4-14-98 |
| | 68 | 6,061,722 | 5-9-00 | Lipa et al. | | | 12-23-96 |
| | 69 | 6,075,541 | 6-13-00 | Maclinovsky | | | 11-7-97 |
| | 70 | 6,088,522 | 7-11-00 | Lee et al. | | | 7-31-97 |
| | 71 | 6,104,699 | 8-15-00 | Holender et al. | | | |
| | 72 | 6,108,309 | 8-22-00 | Cohoe et al. | | | 12-8-97 |
| | 73 | 6,111,857 | 8-29-00 | Soliman et al. | | | 9-11-97 |
| | 74 | 6,122,083 | 9-19-00 | Ohta et al. | | | 10-3-94 |
| | 75 | 6,148,010 | 11-14-00 | Sutton et al. | | | 6-24-98 |
| ✓ | 76 | 6,199,032 | 3-6-01 | Anderson | | | 7-22-98 |
| AS | 77 | 6,204,813 | 3-20-01 | Wadell et al. | | | 2-20-98 |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

EXAMINER /Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)
02560035B *P*

Application Number
not assigned

Applicant(s)
T. Rappaport, et al.

Filing Date
concurrently

Group Art Unit
not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|----------|--------------------|-------|----------|-------------------------------|
| AS | 78 | 6,208,833 | 3-27-01 | Preschutti et al. | | | 6-24-97 |
| | 79 | 6,229,540 | 5-8-01 | Tonelli et al. | | | 10-13-98 |
| | 80 | 6,253,086 | 6-26-01 | Parantainen et al. | | | 3-25-99 |
| | 81 | 6,285,377 | 9-4-01 | Greenbaum et al. | | | 6-26-97 |
| | 82 | 6,289,203 | 9-11-01 | Smith et al. | | | 2-25-98 |
| | 83 | 6,317,599 | 11-13-01 | Rappaport et al. | | | 5-26-99 |
| | 84 | 6,326,987 | 12-4-01 | Alexander | | | 12-19-00 |
| | 85 | 6,330,005 | 12-11-01 | Tonelli et al. | | | 10-6-99 |
| | 86 | 6,311,144 | 10-30-01 | Abu El Ata | | | 7-31-98 |
| ✓ | 87 | 6,337,688 | 1-8-02 | Berstis | | | 1-29-99 |
| AS | 88 | 6,338,031 | 1-8-02 | Lee et al. | | | 9-23-99 |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

EXAMINER /Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

02560035B

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|----------|------------------|-------|----------|-------------------------------|
| AS | 89 | 6,356,758 | 3-12-02 | Almeida et al. | | | 12-31-97 |
| | 90 | 6,393,432 | 5-21-02 | Flansburg et al. | | | 6-2-99 |
| | 91 | 6,408,312 | 6-18-02 | Forthman et al. | | | 8-30-99 |
| | 92 | 6,442,507 | 8-27-02 | Skidmore et al. | | | 12-29-98 |
| | 93 | 6,470,195 | 10-22-02 | Meyer | | | 10-31-00 |
| | 94 | 6,487,417 | 11-26-02 | Rossoni et al. | | | 11-24-99 |
| | 95 | 6,493,679 | 12-10-02 | Rappaport et al. | | | 5-26-99 |
| | 96 | 6,496,290 | 12-17-02 | Lee | | | 12-17-98 |
| | 97 | 6,499,006 | 12-24-02 | Rappaport et al. | | | 7-14-99 |
| ✓ | 98 | 6,505,045 | 1-7-03 | Hills et al. | | | 4-10-00 |
| AS | 99 | 5,586,254 | 12-17-96 | Kondo | | | |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | |
|--|--|
| | |
| | |

EXAMINER

/Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

| | |
|---------------------------------------|------------------------------------|
| Docket Number (Optional) 02560035B | Application Number not assigned |
| Applicant(s) T. Rappaport, et al. | |
| Filing Date concurrently | Group Art Unit not assigned |

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|----------|----------------|-------|----------|-------------------------------|
| AS | 100 | 6,085,335 | 7-4-00 | Djoko et al. | | | 12-31-97 |
| | 101 | 5,710,758 | 1-20-98 | Soliman et al. | | | 9-29-95 |
| | 102 | 5,821,937 | 10-13-98 | Tonelli et al. | | | 8-12-96 |
| | 103 | 5,774,669 | 6-30-98 | George et al. | | | 7-28-95 |
| | 104 | 5,802,146 | 9-1-98 | Dulman | | | 11-22-95 |
| | 105 | 5,825,759 | 10-20-98 | Liu | | | 7-24-95 |
| | 106 | 5,845,124 | 12-1-98 | Berman | | | 5-1-96 |
| | 109 | 6,199,032 | 3-6-01 | Anderson | | | 7-22-98 |
| | 110 | 5,467,441 | 11-14-95 | Stone et al. | | | 10-6-94 |
| ✓ | 111 | 6,243,772 | 6-5-01 | Ghori et al. | | | 1-31-97 |
| AS | 112 | 5,994,984 | 11-30-99 | Stancil et al. | | | 5-29-98 |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | |
| | | |

| | |
|---|-----------------|
| EXAMINER /Akash Saxena/ (12/26/2006) | DATE CONSIDERED |
|---|-----------------|

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

02560035B β

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | REF | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|-----|-----------------|---------|----------------|-------|----------|-------------------------------|
| AS | 113 | 5,977,851 | 11-2-99 | Stancil et al. | | | 11-13-97 |
| AS | 114 | 5,755,072 | 5-26-98 | Lingafelter | | | 5-13-98 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|--|--|--|
| | | <p>From Bird's Eye Real-time Mapping Software dated 6-30-03</p> <p>* Not Considered as hardcopy is not submitted and/or absent in the file wrapper</p> |
| | | <p>IEEE Transactions on Antennas and Propagation, Vol. 46, No. 8, August 1998, "Effect of Terrain on Path Loss in Urban Environments for Wireless Applications" Leonard Piana and Henry L. Bertoni</p> <p>Not Considered as hardcopy is not submitted and/or absent in the file wrapper</p> |

EXAMINER /Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

02560035B B

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

* EXAMINER

INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1

P. Bahl, V. Padmanabhan, and A. Balachandran, "A Software System for Locating Mobile Users: Design, Evaluation, and Lessons," Microsoft Technical Report, April 2000

2

G. Durgin, T.S. Rappaport, H. Xu, Measurements and Models for Radio Path Loss and Penetration Loss in and Around Homes and Trees at 5.85 GHz," IEEE Transactions on Communications, vol. 46, no. 11, November 1998.

3

C.M. Peter Ho et al., "Antenna Effects on Indoor Obstructed Wireless Channels and a Deterministic Image-Based Wide-Band Propagation Model for In-Building Personal Communications Systems," International Journal of Wireless Information Networks, Vol. 1, No. 1, 1994.

4

S. Kim et al., "Radio Propagation Measurements and Predictions Using Three-dimensional Ray Tracing in Urban Environments at 908 MHz and 1.9 GHz," IEEE Transactions on Vehicular Technology, vol. 48, no. 3, May 1999

5

T.S. Rappaport et al., "Use of Topographic Maps with Building Information to Determine Antenna Placements and GPS Satellite Coverage for Radio Detection and Tracking in Urban Environments," MPRG Technical Report MPRG-TR-95-14, Virginia Tech, September 1995

6

R.K. Morrow, Jr. and T.S. Rappaport, "Getting In," Wireless Review Magazine, March 2000.

7

Wireless Valley Communications, Inc., "SitePlanner 3.16 for Windows 95/98/NT User's Manual," Software User's Manual, pp.5-148 to 5-156, 1999.

8

M. Panjwani et al., "Interactive Computation of Coverage Regions for Wireless Communication in Multifloored Indoor Environments," IEEE Journal on Selected Areas in Communications, Vol. 14, No. 3, April 1996.

9

L. Piazzzi and H.L. Bertoni, "Achievable Accuracy of Site-Specific Path-Loss Predictions in Residential Environments" IEEE Transactions on Vehicular Technology, vol. 48, no. 3, May 1999.

10

T.S. Rappaport et al., "Wireless Communications: Past Events and a Future Perspective", IEEE Communications Magazine, May 2002.

11

T.S. Rappaport et al., "Radio Propagation Prediction Techniques and Computer-Aided Channeling Modeling for Embedded Wireless Microsystems," ARPA Annual Report, MPRG Technical Report MPRG-TR-94-12, Virginia Tech, Jul 1994.

12

T.S. Rappaport et al., "Use of Topographic Maps with Building Information to Determine Antenna Placements for Radio Detection and Tracking in Urban Environments," MPRG Technical Report MPRG-TR-95-14, Virginia Tech, November 1995

EXAMINER

* Not Considered as hardcopy is not submitted and/or absent in the file wrapper

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

02560035B β

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

EXAMINER

INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

13

D. Ullmo et al., "Wireless Propagation in Buildings: A Statistical Scattering Approach," IEEE Transactions on Vehicular Technology, Vol. 48, No. 3, May 1999.

14

T.S. Rappaport, "wireless Communications: Principles and Practice" Second Edition, Prentice Hall, 2002.

15

T.S. Rappaport et al., "Use of Topographic Maps with Building Information to Determine Antenna Placements and GPS Satellite Coverage for Radio Detection and Tracking in Urban Environments," MPRG Technical Report MPRG-TR-95-14, Virginia Tech, September 1995.

16

T.S. Rappaport et al., "Indoor Path Loss Measurement for Homes and Apartments at 2.4 and 5.85 GHz," private report produced for Motorola, December 16, 1997.

17

T.S. Rappaport, "Isolating Interference," Wireless Review Magazine, May 2000.

18

Slides from T.S. Rappaport and R. Skidmore, "Introduction to In-Building Wireless Systems," Infocast In-Building Wireless Solutions Conference and Exposition, February 4, 2003.

19

S. Sandhu, M.P. Koushik, and T.S. Rappaport "Predicted Path Loss for Roslyn VA, First set of predictions for ORD Project on Site Specific Propagation Prediction," MPRG Technical Report MPRG-TR-94-20, Virginia Tech, December 1994.

20

S. Sandhu, M.P. Koushik, and T.S. Rappaport, "Predicted Path Loss for Roslyn VA, First set of predictions for ORD Project on Site Specific Propagation Prediction," MPRG Technical Report MPRG-TR-94-20, Virginia Tech, March 1995.

21

S. Seidel et al., "Site-Specific Propagation Prediction for Wireless In-Building Personal Communication Design," IEEE Transactions on Vehicular Technology, Vol. 43, No. 4, November 1994.

22

S. Shakkottai and T.S. Rappaport, "Research Challenges in Wireless Networks: A Technical Overview," Proceeding of the Fifth International Symposium on Wireless Personal Multimedia Communications, Honolulu, HI, October 2002.

23

H. Sherali et al., "On the Optimal Location of Transmitters for Micro-cellular Radio Communication System Design," IEEE Journal on Selected Areas in Communications, Vol. Vol. 14, No. 3, pp. 662-673, May 1996.

24

R. Skidmore et al., "A Comprehensive In-Building and Microcellular Wireless Communication System Design Tool" The Bradley Department of Electrical Engineering, MPRG-TR-97-13, June 1997.
Master's Thesis - unpublished by Virginia Tech for 2 years after submission.

EXAMINER

* Not Considered as hardcopy in the file wrapper ☒ not submitted and/or absent

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)
02560035B~~B~~

Application Number
not assigned

Applicant(s)
T. Rappaport, et. al.

Filing Date
concurrently

Group Art Unit
not assigned

EXAMINER
INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Company Web Page "Actix" www.actix.com product name: E-NOS (now E-AMS)

Company Web Page "Agilent" www.agilent.com product name: OPAS32

Company Web Page "Agilent" www.agilent.com product name: Wizard

Company Web Page "Comarco" www.edx.com product name: SignalPro

Company Web Page "ComOpt" www.comopt.com product name: CellOpt AFP

Company Web Page "Lucent" www.bell-labs.com product name: WiSE

Company Web Page "Ericsson" www.ericsson.com product name: TEMS Lite

Company Web Page "Ericsson" www.ericsson.com product name: TEMS

Company Web Page "Marconi" www.marconi.com product name: PlanET

Company Web Page "Marconi" www.marconi.com product name: decibelPlanner

Company Web Page "Schema" www.schema.com product name: Optimizer

Company Web Page "ScoreBoard" www.scoreboard.com product name: ScoreBoard

EXAMINER Webpage archive dates not present
No hardcopy presented with cited DATE CONSIDERED
relevance

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

02560035BB

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

EXAMINER
INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

24

R. Skidmore, et al., Russell Senate Office Building Propagation Study, Project Report for Joseph R. Loring & Associates, "Project Update," AoC Contract # Acbr96088, prepared for Office of the Architect of the Capitol, January 19, 1997.

25

R. Skidmore, et al., Russell Senate Office Building Propagation Study, Project Report for Joseph R. Loring & Associates, "Assessment and Study of the Proposed Enhancements of the Wireless Communications Environment of the Russell Senate Office Building (RSOB) and Associated Utility Tunnels," AoC Contract # Acbr96088, prepared for Office of the Architect of the Capitol, February 20, 1997.

26

R. Torres et al., "CINDOOR: An Engineering Tool for Planning and Design of Wireless Systems in Enclosed Spaces," IEEE Antennas and Propagation Magazine, Vol. 41, No. 4 August 1999

27

R. Skidmore et al., "Interactive Coverage Region and System Design Simulation for Wireless Communication Systems in Multi-Floored Indoor Environments: SMT Plus *tm*," IEEE ICUPC Proceedings, 1996.

T.S. Rappaport et al., "Radio Propagation Prediction Techniques and Computer-Aided Channel Modeling for Embedded Wireless Microsystems," MPRG Tech. Report MPRG-TR-95-08, Virginia Tech, July 1995.

1. Article titled: 'Building Database Manipulator' Copyright January 1998 by MPRG and Virginia Tech

2. PCS' 97 Track 7: Engineering & Systems Management by Ted Rappaport and James S. Tucker

3. Propagator Volume 8 No. 3 Summer 1997

4. SMT Plus 1.0 User's Manual by Roger Skidmore and Ted Rappaport, Copyright August 1996 by Virginia Tech

Software by Andrew titled "RF Planner" dated 6-17-97

1

2. A user guide titled "Andrew Microwave System Planner" dated 7-99

3. A user guide titled "Andrew Antenna System Planner" dated 6-99

* Not Considered as hardcopy is not submitted and/or absent in the file wrapper

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

02560035B B

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | REF | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|----------------------|-----|--|-----------------|----------------------|----------------|
| AS | | US-5,761,674 | 06-1998 | Ito, Kenji | 707/104.1 |
| | | US-6,509,906 | 01-2003 | Awe et al. | 345/619 |
| | | US-6,236,409 | 05-2001 | Hartman, Linda Marie | 345/629 |
| | | US-4,964,060 | 10-1990 | Hartsog, Charles H. | 703/1 |
| | | US-5,689,705 | 11-1997 | Fino et al. | 707/201 |
| | | US-5,949,988 | 09-1999 | Feisullin et al. | 703/2 |
| | | US-5,907,494 | 05-1999 | Dangelo et al. | 703/1 |
| AS | | US-6,272,447 | 08-2001 | Gavin et al. | 703/1 |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |
| | | US- | | | |

FOREIGN PATENT DOCUMENTS

| REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | YES | NO |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | |
|--|--|
| | |
| | |

EXAMINER

/Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)

02560035BB

Application Number

not assigned

Applicant(s)

T. Rappaport, et al.

Filing Date

concurrently

Group Art Unit

not assigned

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|----|---|--|-----------------|----------------------|----------------|
| AS | A | US-5,625,827 | 04-1997 | Krause et al. | 345/964 |
| | B | US-5,485,568 | 01-1996 | Venable et al. | 345/589 |
| | C | US-5,907,850 | 05-1999 | Krause et al. | 345/854 |
| | D | US-5,493,679 | 02-1996 | Virgil et al. | 706/819 |
| | E | US-5,867,112 | 02-1999 | Kost, James F. | 341/51 |
| | F | US-4,885,694 | 12-1989 | Pray et al. | 345/636 |
| | G | US-5,861,887 | 01-1999 | Butler et al. | 345/428 |
| | H | US-5,467,441 | 11-1995 | Stone et al. | 345/619 |
| | I | US-5,755,072 | 05-1998 | Lingafelter, Kenneth | 52/741.1 |
| | J | US-5,491,644 | 02-1996 | Pickering et al. | 709/226 |
| V | K | US-5,994,984 | 11-1999 | Stancil et al. | 333/248 |
| AS | L | US-6,243,772 | 06-2001 | Ghori et al. | 710/68 |
| | M | US- | | | |

FOREIGN PATENT DOCUMENTS

| | REF | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|--|-----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | |
|--|--|
| | |
| | |

EXAMINER /Akash Saxena/ (12/26/2006)

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Annotated IDS

AL

IDS - 03/26/2004

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**